

Amendments to the claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) An electrochemical element or cell, characterized in that it contains an anode, a separator, and a cathode composed of manganese dioxide, in that this cathode incorporates at least one additive selected from the group consisting of ~~an inorganic crystalline additive of tungsten oxide,~~ compounds of zirconium, titanium oxide with rutile structure, yttrium oxide, cerium oxide, zeolites, ~~and~~ aluminosilicates and tungsten oxides selected from the group consisting of barium tungstenate (BaWO_4), sodium tungstenate (Na_2WO_4), strontium tungstenate (SrWO_4) and manganese (II) tungstenate (MnWO_4), ~~and at least one of these is present~~ in a proportion or range between one ten thousandth (0.0001) and ten (10) percent by weight of the cathode mass.

2. (Cancelled)

3. (Currently amended) The electrochemical element or cell according to the first claim, wherein said at least one additive is a zirconium compound selected from the group

consisting of ~~further characterized in that the inorganic crystalline additives included in the cathode consist of zirconium compounds, specifically zirconium oxynitrate ($\text{ZrO}(\text{NO}_3)_2$) and zirconium oxychloride (ZrOCl_2).~~

4. (Currently amended) The electrochemical element or cell according to the first claim, wherein said at least one additive is ~~further characterized in that the inorganic crystalline additives included in the cathode consist of titanium dioxide (TiO_2) with rutile structure.~~

5. (Currently amended) The electrochemical element or cell according to the first claim, wherein said at least one additive is ~~further characterized in that the inorganic crystalline additives included in the cathode consist of yttrium oxide (Y_2O_3) or cerium dioxide (CeO_2).~~

6. (Currently amended) The electrochemical element or cell according to the first claim, wherein said at least one additive is ~~further characterized in that the inorganic crystalline additives included in the cathode consist of zeolites, aluminosilicate clays, or mixtures of both.~~

7. (Currently amended) The electrochemical element or cell

according to the first claim, wherein said at least one additive is a zeolite ~~further characterized in that the mentioned zeolites included in the cathode have~~ that has a ZSM-5 pentasil structure with an Si/Al ratio in the range of 20 to 600.

8. (Currently amended) The electrochemical element or cell according to the first claim, wherein said at least one additive is an aminosilicate, said aminosilicate comprising an aminosilicate clay selected from the group consisting of ~~further characterized in that the mentioned aluminosilicate clays included in the cathode are of the kaolinite or and montmorillonite type~~ with an Si/Al ratio in the range of 2 to 5.

9. (Currently amended) The electrochemical element or cell according to the first claim, further characterized in that the total ~~anticipated~~ proportion of inorganic crystalline additive in the cathode is made up of one or more of ~~the specified~~ an inorganic crystalline additives additive selected from the group consisting of barium tungstenate (BaWO_4), sodium tungstenate (Na_2WO_4), strontium tungstenate (SrWO_4), manganese (II) tungstenate (MnWO_4), zirconium oxynitrate ($\text{ZrO}(\text{NO}_3)_2$), zirconium oxychloride (ZrOCl_2),

titanium dioxide (TiO₂) with rutile structure, yttrium oxide (Y₂O₃), cerium dioxide (CeO₂), zeolites, aluminosilicate clays, mixtures of both, a zeolite that has a ZSM-5 pentasil structure with an Si/Al ratio in the range of 20 to 600, kaolinite and montmorillonite with an Si/Al ratio in the range of 2 to 5.

10. (Currently amended) The electrochemical element or cell according to the first claim, further characterized in that ~~the mentioned inorganic crystalline additives may contain~~ said additive contains water of crystallization.

11. (Currently amended) The electrochemical element or cell according to the first claim, further characterized in that ~~the mentioned inorganic~~ said additives ~~may~~ contain foreign ions and ~~thus be~~ are doped with them.

12. (Original) The electrochemical element or cell according to the first claim, further characterized in that the element or cell is alkaline.

13. (Original) The electrochemical element or cell according to the first claim, further characterized in that the anode includes zinc particles.

14. (Original) The electrochemical element or cell according to the first claim, further characterized in that it also contains a solution of electrolyte.

15. (Currently amended) A cathode for an electrochemical element or cell ~~according to the first claim, further~~ characterized in that it is a cathode composed of manganese dioxide and it incorporates at least one additive selected from the group consisting of an inorganic crystalline additive of tungsten oxide, compounds of zirconium, titanium oxide with rutile structure, yttrium oxide, cerium oxide, zeolites, ~~and~~ aluminosilicates and tungsten oxides selected from the group consisting of barium tungstenate (BaWO_4), sodium tungstenate (Na_2WO_4), strontium tungstenate (SrWO_4) and manganese (II) tungstenate (MnWO_4), ~~and in that~~ at least one of these additives is present in a proportion or range between one ten thousandth (0.0001) and ten (10) percent by weight of the cathode mass.

16. (Cancelled)

17. (Currently amended) The cathode for an electrochemical element or cell in accordance with ~~the first claim and the~~

fifteenth claim, wherein said at least one additive is a zirconium compound selected from the group consisting of
~~further characterized in that it is a cathode where the~~
~~additives included in it consist of~~ zirconium compounds,
specifically zirconium oxynitrate ($\text{ZrO}(\text{NO}_3)_2$) and zirconium
oxychloride (ZrOCl_2).

18. (Currently amended) The cathode for an electrochemical
element or cell in accordance with ~~the first claim and the~~
fifteenth claim, wherein said at least one additive is
~~further characterized in that it is a cathode where the~~
~~additives included in it consist of~~ titanium dioxide (TiO_2)
with rutile structure.

19. (Currently amended) The cathode for an electrochemical
element or cell in accordance with ~~the first claim and the~~
fifteenth claim, wherein said at least one additive is
~~further characterized in that it is a cathode where the~~
~~additives included in it consist of~~ yttrium oxide (Y_2O_3) or
cerium dioxide (CeO_2).

20. (Currently amended) The cathode for an electrochemical
element or cell in accordance with ~~the first claim and the~~
fifteenth claim, wherein said at least one additive is

~~further characterized in that it is a cathode where the additives included in it consist of~~ zeolites, aluminosilicate clays, or mixtures of both.

21. (Currently amended) The cathode for an electrochemical element or cell in accordance with ~~the first claim and the~~ fifteenth claim, wherein said at least one additive is a zeolite that has ~~further characterized in that it is a~~ ~~cathode where the zeolites included in it have a~~ ZSM-5 pentasil structure with an Si/Al ratio in the range of 20 to 600.

22. (Currently amended) The cathode for an electrochemical element or cell in accordance with ~~the first claim and the~~ fifteenth claim, wherein said at least one additive is an aminosilicate, said aminosilicate comprising an aminosilicate clay selected from the group consisting of ~~further characterized in that it is a cathode where the aluminosilicate clays included in it are of the kaolinite~~ ~~or~~ and ~~montmorillonite type~~ with an Si/Al ratio in the range of 2 to 5.

23. (Currently amended) The cathode for an electrochemical element or cell in accordance with the first claim and the

fifteenth claim, further characterized in that the total ~~anticipated~~ proportion of inorganic crystalline additive in the cathode is made up of one or more of ~~the specified~~ an inorganic crystalline additives additive selected from the group consisting of barium tungstenate (BaWO_4), sodium tungstenate (Na_2WO_4), strontium tungstenate (SrWO_4) and manganese (II) tungstenate (MnWO_4), zirconium oxynitrate ($\text{ZrO}(\text{NO}_3)_2$), zirconium oxychloride (ZrOCl_2), titanium dioxide (TiO_2) with rutile structure, yttrium oxide (Y_2O_3), cerium dioxide (CeO_2), zeolites, aluminosilicate clays, mixtures of both, a zeolite that has a ZSM-5 pentasile structure with an Si/Al ratio in the range of 20 to 600, kaolinite and montmorillonite with an Si/Al ratio in the range of 2 to 5.

24. (Currently amended) The cathode for an electrochemical element or cell in accordance with ~~the first claim and the fifteenth claim~~, further characterized in that ~~the mentioned inorganic crystalline additives can contain~~ said additive contains water of crystallization.

25. (Currently amended) The cathode for an electrochemical element or cell in accordance with ~~the first claim and the fifteenth claim~~, further characterized in that it is a

cathode where the additives included in it ~~can~~ contain foreign ions and ~~therefore be~~ are doped with them.

26. (Currently amended) A cathode for an electrochemical element or cell, characterized in that it is a galvanic ~~[electrolytic]~~ element which includes a cathode of manganese dioxide according to the fifteenth claim.